
Grace Welham, Pharm.D.
Dean Health System, Drug Information
1808 W. Beltline Hwy.
Madison, WI 53726

Governor's Blue Ribbon Task Force on
Waste Materials Recovery and Disposal
c/o Mr. Tony Vogel, Esq.
Quarles and Brady, LLP.
411 E. Wisconsin Ave.
Milwaukee, WI 53202

November 4, 2005

Dear Chairman Vogel,

Currently, unused and expired household medications are legally disposed of by flushing them down the toilet or placing them in the trash. Unfortunately, waste water treatment facilities are unable to remove pharmaceutical waste from waste water and landfill leachate, and the pharmaceuticals are surfacing in our streams and ground water. Water treatment experts project that the technology to remove pharmaceutical waste from the water will not be available for about 20 years. Research is showing disruptions in aquatic food chains as well as reproductive malformations in fish. There is concern that the rise in birth defects, particularly a condition known as hypospadias, is a result of medication (particularly estrogens) in the water we drink.

"Medication Collection Days" or "Take-back Programs" have been identified as a mechanism for preventing pharmaceuticals from entering our water. These programs are one or two day collections where unused and expired medications are collected and transported to a hazardous waste incinerator for incineration.

Some have argued take-back programs do not address the issue of medications that enter the water through human excretion in urine and feces. Compliance of prescribed medications is estimated at 40-60%; which means roughly 50% of patients take their medications as directed by prescribers. In addition to prescribed medications, over-the-counter medications are often partially used and then discarded. While take-back programs do not solve all problems of pharmaceuticals in water, it is a step towards a healthier environment and community. Additionally, take-back programs address public health issues that have been raised with the disposal of medication in landfills. Diversion is the improper use of medications by an unintended user, and has been the rationale for flushing medications. With law enforcement involved and DEA guidelines on handling controlled substances, the opportunity for diversion is decreased, and can even allow for future research on unused controlled substances.

Take-back programs have been conducted in the States of Maine and Indiana. In Indiana, collections have yielded roughly 500 lbs. of collected medications per county (population 190,000 in 2004). Collections are expected to yield more as the population becomes aware of the collections and environmental concerns. Programs have also been held in Maine, and have yielded 3,000 lbs. from a population of 140,000. These numbers are compelling, and show there is merit to these programs. Educating the community about the proper disposal of medications is imperative to the success of take-back programs.

I have been working on behalf of Dean Health System with WDNR, Onyx Environmental, and law enforcement to implement a Madison-based program since February 2005. As a result of this effort, the Drug Enforcement Administration (DEA) has written prescriptive requirements regarding the handling of controlled substances (not previously done before), and the Milwaukee Regional DEA office is supportive of this effort.

As a concerned citizen of the State of Wisconsin, I ask that the Governor's Task Force on Waste Materials Recovery and Disposal support efforts to reduce the amount of pharmaceuticals entering landfills and wastewater systems both through education of the public and with financial support. The hard cost of disposal for our one day collection is roughly \$10,000. The project I am working on has been stalled due to lack of funding. While I continue to seek funding, I ask the Task Force to consider establishing a grant system for local governments or businesses that wish to aid in the prevention of pharmaceuticals entering the waters of the state.

This emerging issue of the negative impact of pharmaceuticals on our health and environment is complex and multi-faceted. Thank you for your time and consideration on this very important issue. Please contact me if I can be of any assistance to the task force in this endeavor. I would consider it an honor to assist the Task Force in their efforts.

Sincerely,

Grace Welham, Pharm.D.

\\dhs\dfs\Groups\Pharmacy\Drug Policy\Grace's Files\Med disposal\Task force letter.doc